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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/679,357	10/07/2003	Riccardo Cesarini	7040.0054.01	3867

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EXAMINER

MAKI, STEVEN D

ART UNIT	PAPER NUMBER
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1733

DATE MAILED: 11/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/679,357

Applicant(s)

CESARINI ET AL.

Examiner

Steven D. Maki

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 August 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 39-62 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 39-62 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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1) The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2) Claims 39-53 and 55-58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sommer (US 2104532) in view of Great Britain '472 (GB 2224472), the admitted prior art (specification page 3 lines 1-5) and Japan '109 (JP 6-247109) and optionally Hargraves (US 1996418).

Sommer, directed to preventing sliding of a tire on a wet road, discloses a pneumatic vehicle tire (automobile tire) having a tread comprising repeating groups of four inclined transversal grooves of different lengths wherein the groups of inclined transversal grooves on one side of the center plane of the tire alternate with the groups of inclined transversal grooves on the other side so that a zigzag strip exists at the center plane of the tire. See figure 8, figure 8a and page 3 lines 17. Sommer states that the "tread of Figs. 8 and 8a has only slanting grooves 51 and ribs 53 running from the sides of the tire to its center plane in opposite directions " (page 3 lines 1-3). Accordingly, the tread has no circumferential grooves. The width of the grooves is $\frac{1}{4}$ to 5 mm. The width of the ribs (land portions between the grooves) is 3-10 mm. For example, the groove may have a width of 5 mm and the rib may have a width of 10 mm - the ribs thereby being wider than the grooves. See page 1 right column line 51 to page 2 left column lines 1-15. Sommer does not specifically recite that the tire has a carcass, belt and beads.

As to claim 39, it would have been obvious to one of ordinary skill in the art to provide the automobile tire of Sommer with the claimed tire construction (i.e. carcass, sidewalls, beads, belt) since Great Britain '472, also disclosing a tire tread having inclined grooves but no circumferential grooves, teaches using such a tread in a vehicle tire having a carcass, sidewalls, belt and beads (see figure 1, page 5 lines 30-34). The limitation of the tire having a curvature ratio not greater than 0.1 would have been obvious since (1) Sommer, which teaches that the tread may be used for an automobile, shows the profile of the tread as defining a relatively small curvature ratio (see figure 1) (2) Great Britain '472, which teaches that the tread may be used for a vehicle, shows the profile of the tread as defining a relatively small curvature ratio (see figure 1) and (3) the admitted prior art teaches that the curvature ratio of a conventional tire for motor vehicles (in contrast to motorcycle tires) has a value equal to about 0.05 and in any case is never higher than 0.1 (specification, page 3 lines 1-7).

In claim 39, the claimed subject matter of "wherein each substantially-continuous tread portion ends at an equatorial groove portion of a same transversal groove of an axially-opposed group of transversal grooves, wherein each of the transversal grooves ends at a predetermined distance from the equatorial groove portion of a longest transversal groove of the axially-opposed group of transversal grooves so that all of the transversal grooves end within the equatorial zone" reads on the arrangement of inclined transversal grooves shown by Sommers in figures 8 and 8a. In any event: it would have been obvious to one of ordinary skill in the art to arrange Sommers' inclined transversal grooves of differing lengths such that the end of each inclined transversal

groove of one group on one side of the tread is spaced the same distance from the longest inclined transversal groove of the group on the other side of the tread since Hargraves suggests arranging alternating groups of inclined transversal grooves of differing lengths in a tread for an automobile such that each inclined transversal groove ends at the same predetermined distance from an axially opposed longest inclined transversal groove for the advantage of giving sufficient traction, resisting skidding in all directions and reducing noise.

Furthermore, it would have been obvious to one of ordinary skill in the art to provide Sommer's transversal grooves, which are for preventing sliding on a wet road (page 1 lines 10-12), such that "the equatorial groove portion of each transversal groove has a uniform width" and "the shoulder groove portion of each transverse groove has at least a portion having a width smaller than the width of the equatorial groove portion" since Japan '109, also directed to a tire having inclined grooves but no circumferential grooves, teaches providing inclined grooves in an equatorial zone with a uniform width and providing branching grooves in the shoulder zones with a smaller width than the inclined grooves in the equatorial zone portion in order to obtain high wet performance and low noise. Hence, Sommer and Japan '109 are both directed to a directional tread pattern having inclined grooves for preventing slipping on wet roads wherein the inclined grooves on one side are shifted relative to the inclined grooves on the other side. See figure 8, 8a of Sommer and figures 1-3 of Japan '109. Japan '109 suggests improving such a directional tread pattern by using branching grooves having a narrower width and a larger angle of inclination to the EP than that for the inclined

grooves. The improvement includes reducing noise. See for example paragraph 26 of the machine translation of Japan '109. The combination of a branch groove 3 and an inclined groove 2 constitutes a transversal groove. With respect to figures 1-3 of Japan '109, uniform width inclined grooves 2 in figures 1 and 2 are an alternative to varying width inclined grooves in figure 2. The tread patterns of figures 1 and 2 are asymmetric tread patterns. Japan '109 teaches that the tread pattern may be symmetric instead of asymmetric. See paragraph 12 of machine translation for Japan '109 and figure 2 of Japan '109.

As to claim 40, Sommer's inclined transversal grooves are inclined at angle of more than 45 degrees.

Claim 41 fails to define a tread pattern different from that shown by Sommers and suggested by the optional Hargraves.

As to claims 42-44, Sommer suggests straight and parallel inclined transversal grooves and Japan '109 suggests straight and parallel inclined grooves.

As to claim 45, Sommer and the optional Hargraves suggest ending the inclined grooves close the longest groove of the group on the other side of the tire.

As to claims 46-47, it would have been obvious to shape the inclined grooves of Sommers such that the shoulder portion is less steeply inclined and connected via a curved groove portion with the equatorial zone portion of the inclined groove in view of (1) Japan '109's teaching to incline the narrow branching groove of the inclined groove 2 at a larger angle with respect to the EP and (2) Great Britain '472's teaching to increase the inclination of inclined grooves in shoulder zones of the tire as shown in figure 2 to

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provide a good non-skid facility, etc while maintaining open drainage paths. Hence, Japan '109 and Great Britain '472 motivate one of ordinary skill in the art to configure Sommer's transversal grooves so as to have a shallow inclined portion and a steeply inclined portion.

As to claim 48, Sommers teaches a groove width of 5 mm.

As to claims 49-50, it would have been obvious to narrow the inclined transversal grooves in the shoulder zones to the claimed width of 40-60% since Japan '109 teaches that the narrow width branching groove may have a width of 40% of the inclined grooves.

As to claim 51, Sommers shows four inclined grooves.

As to claim 52, Sommers teaches a groove depth of 6 mm.

As to claim 53, it would have been obvious to longitudinally stagger by about 50% of a mean pitch since Sommers and the optional Hargraves show circumferentially shifting one group of grooves relative to another group of grooves.

As to claim 55, it would have been obvious to add the claimed transverse notches in Sommer's tread since Great Britain '472 suggests adding short blind grooves (notches) 48, 58 between inclined grooves to the shoulder zones of a tread, which like that of Sommers has no circumferential grooves.

As to claim 56, Sommer's inclined grooves have the claimed decreasing length.

Claim 57 fails to define a tread pattern different from that shown by Sommers and suggested by the optional Hargraves.

As to claim 58, one of ordinary skill in the art would readily understand Sommer as teaching providing a set of front tire and rear tires having the tread pattern of figures 8, 8a since Sommer's teaches using the tire on an automobile. As to 3-5 (front) and 5-7 (rear), it would have been obvious to use five inclined grooves in each group since (1) Sommer's suggests using plural (i.e. four) inclined grooves in each group and optionally (2) Hargraves shows using five inclined grooves in a group.

3) Claim 54 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sommer in view of Great Britain '472, the admitted prior art and Japan '109 and optionally Hargraves as applied above and further in view of Europe '270 (EP 565270).

As to claim 54, it would have been obvious to add the claimed longitudinal slots to Sommer's tread since (1) Sommers teaches that the tread may also comprise circumferential grooves (figure 9) and (2) Europe '270 suggests adding circumferential grooves 3, 3, which cross inclined grooves, between the shoulder zone and equatorial zone to improve resistance to hydroplaning.

4) Claims 59-62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sommer in view of Great Britain '472, the admitted prior art and Japan '109 and optionally Hargraves as applied above and further in view of Europe '851 (EP 722851).

As to claims 59-62, it would have been obvious to provide the front and rear tires of Sommers as a set of front tires and a set of different rear tires as claimed in view of Europe '851's suggestion to use different front and rear tires wherein each of those tires comprises inclined grooves but no circumferential grooves.

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5) The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

6) Claims 39-62 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 9-31 of U.S. Patent No. 6,656,300 in view of Japan '109.

The terminal disclaimer filed 8-25-04 is not approved since it was not signed by an attorney of record.

The claims in this application fail to exclude the combination of the subject matter of "wherein the substantially-continuous tread portions alternately extend from opposite shoulder zones towards the equatorial plane of the tire to form a substantially continuous grid" and the subject matter of "wherein the tread further comprises two

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longitudinal slots circumferentially extending on opposite sides of the equatorial plane of the tire along the shoulder zones".

With respect to the uniform width equatorial portion and smaller width shoulder groove portion, it would have been obvious to one of ordinary skill in the art to provide the transversal grooves of claims 39-62 such that "the equatorial groove portion of each transversal groove has a uniform width" and "the shoulder groove portion of each transverse groove has at least a portion having a width smaller than the width of the equatorial groove portion" since Japan '109 teaches providing inclined grooves in an equatorial zone with a uniform width and providing inclined grooves in the shoulder zones with a smaller width than the inclined grooves in the equatorial zone portion in order to obtain high wet performance and low noise.

Remarks

7) Applicant's arguments with respect to claims 39-62 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's arguments filed 8-25-04 have been fully considered but they are not persuasive.

With respect to applicant's arguments regarding the addition of "the equatorial groove portion of each transversal groove has a uniform width" and "the shoulder groove portion of each transverse groove has at least a portion having a width smaller than the width of the equatorial groove portion" to claims 38 and 58, note the application of Japan '109 (newly cited).

Applicant argues and the examiner agrees that Takahashi (EP 688685) discloses non-uniform grooves having a width W0 in the middle region and a smaller width W2 at the end of the equatorial portion. However, Japan '109 (newly cited) teaches uniform width grooves in a tread pattern generally similar to that of Sommers.

8) No claim is allowed.

9) Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

10) Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven D. Maki whose telephone number is (571) 272-1221. The examiner can normally be reached on Mon. - Fri. 7:30 AM - 4:00 PM.

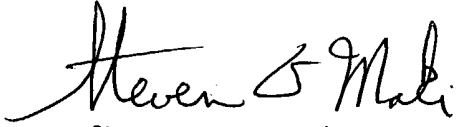
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Blaine Copenheaver can be reached on (571) 272-1156. The fax phone

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number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Steven D. Maki
November 12, 2004


STEVEN D. MAKI 11-12-04
PRIMARY EXAMINER
~~GROUP 1300~~
AU 1733